

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027069**Date Inspected:** 25-Jan-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernard Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Emergency Gates CCO-179**Summary of Items Observed:**

Emergency Gate Installation associated with CCO-179

The Caltrans Quality Assurance (QA) Inspector Rick Bettencourt arrived on site at the Skyway Bike Path to randomly observe the American Bridge/Fluor personnel install the Emergency Gates associated with CCO-179. Upon the arrival of the QA Inspector at gate #8 the QA Inspector noted the stainless steel gate tracks that had previously been rejected by the QA Inspector Rick Bettencourt was being installed. The QA Inspector randomly observed the gate tracks to have noncompliant undercut, incomplete fusion, noncompliant weld profiles and under fill. The QA Inspector previously performed a visual inspection of the material upon arrival at the ABF warehouse. Upon inspection of the material and after a discussion with the Smith Emery (SE) Quality Control Inspector Bill Norris, the QA Inspector concurred with the QC Inspectors findings of 23 out of the 28 gate tracks had rejectable welds (see TL-6031 for 1/18/12). The QA Inspector asked the SE QC Inspector Bernard Docena who was observing the installation of the gates, associated hardware and tracks, if he was aware of the noncompliant welds. Mr. Docena informed the QA Inspector he was aware of the non-compliant welds but ABF had directed their personnel to install the tracks anyway (see summary of conversation). The QA Inspector noted the gate identified as #8 was installed to rail #58 previously and today gate #9 was being installed at gate #9. In addition to the weld defects, the QA Inspector noted the rails were distorted and bowed up. It was noted the rails were being attached to a pre-installed sole plate on the grating with stainless steel screws in drilled and tapped holes. It was noted by the QA Inspector the ABF representatives were finding it difficult to drill, tap and install the screws due to the distorted gate rails. The QA Inspector noted the rails did not sit flush on the sole plate they were screwed into. The QA Inspector noted and Nonconformance Report (NCR) was generated and submitted for review for the above identified nonconforming items.

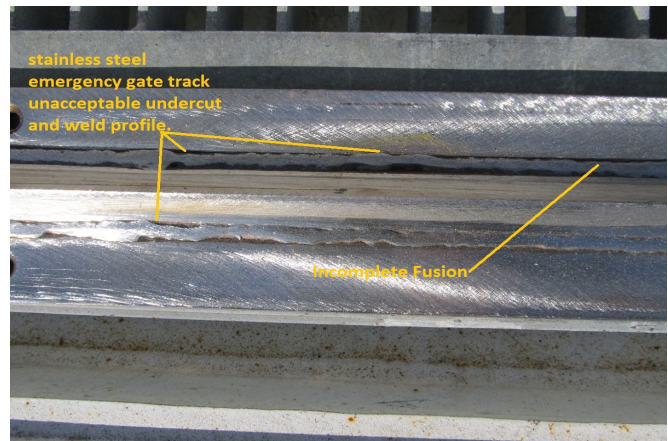
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Gate #9-Rail #9

The QA Inspector randomly observed the ABF welder Jason Collins and ABF representatives Bradley Whitburn and Mathew Chamberlin fit up gate retainer, gate latch and stainless steel gate track at the above identified location. The QA Inspector noted the hardware had been previously placed at the location and the paint and galvanized coating had been removed on the existing rail for installation of the emergency gate hardware. The QA Inspector randomly observed the ABF welder fit up and tack weld the gate retainer bracket and gate latch to the existing rail. After they were tack welded in place the gate track was positioned for drilling and tapping the holes for the installation of the stainless steel screws. Once the gate was moving free and clear, the SE QC Inspector performed a visual inspection of the fit up. The QC Inspector informed the QA Inspector the fit up was acceptable. The QA Inspector performed a random visual inspection of the fit up and noted it did appear to be in general compliance with the contract documents for the exception of the stainless steel gate tracks welds.

The QA Inspector observed the ABF welder Jason Collins perform shielded metal arc welding (SMAW) of the restrainer bracket and gate latch for the above identified location. The QA Inspector noted the ABF welder was utilizing 1/8" E7018 low hydrogen electrodes with 122 Amps. The QA Inspector noted the SMAW parameters did appear to be in general compliance with the contract requirements. The QA Inspector noted the ABF personnel did not complete the installation of the above identified emergency gate on this date.



Summary of Conversations:

The QA Inspector spoke with the SE QC Inspector Bill Norris on the above described issue with the stainless steel gate tracks. Mr. Norris informed the QA Inspector he originally had rejected the material for above described

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defects, but was instructed by ABF to “write a report without characterizing or accepting or rejecting the material”. Mr. Norris added the material was never officially rejected by SE or by ABF. The QA Inspector added the material was rejected by Caltrans QA upon arrival. Mr. Norris informed the QA Inspector an ABF internal NCR was written on the noncompliant gate tracks. The QA Inspector ask the QC Inspectors Bernard Docena and Bill Norris if either one of them could produce a document generate by the department allowing the material to be installed as a “fit for service” or the internal ABF NCR. Neither of the Inspectors could produce the either documents, Mr. Norris later called the QA Inspector to inform QA that the ABF internal NCR was being “re-generated”. In addition the QA Inspector added the material was never accepted by the department and ABF was installing the material at their own risk.

The QA Inspector informed the QC Inspector Bernard Docena and Bill Norris a Non Conformance Report (NCR) would be written and submitted for approval for the above identified nonconforming items.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
